

Appl. No.: 09/574,595
Amdt. dated May 16, 2005
Reply to Office Action of November 26, 2004

AMENDMENT

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application. The sole change from the previous listing is the change of claim status for claims 25-40.

1. (Previously amended) A method of displaying latency, the method implemented in a broker-dealer computer system, the system being engaged in automated processing of orders for securities including sending messages to markets and receiving from markets responses to messages, the method comprising:

recording for messages sent to at least two different markets the time when each message is sent and the identity of the market to which each message is sent, the messages comprising orders;

recording for responses received from said markets the time when each response is received, wherein each response corresponds to a particular message of said messages;

calculating for at least a first market a first latency dependent upon at least one recorded time when at least one message is sent to the first market and at least one recorded time when a corresponding response is received from the first market;

calculating for a second market a second latency dependent upon at least one recorded time when at least one message is sent to the second market and at least one recorded time when a corresponding response is received from the second market;

displaying on a device the identity of the first market and the latency for the first market; and

displaying the identity of the second market and the latency for the second market.

2. (Previously amended) The method of claim 1 wherein the first latency further comprises latency for a port.

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3. (Previously amended) The method of claim 1, wherein the first latency comprises an instant latency calculated dependent upon one recorded time when one message is sent to the first market and one recorded time when a corresponding response is received from the first market.

4. (Previously amended) The method of claim 1 wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first market and at least one recorded time when a corresponding response is received from the first market, wherein all the recorded times used in calculating the first latency are recorded during a defined period of time.

5. (Previously amended) The method of claim 1 wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first market and at least one recorded time when a corresponding response is received from the first market, wherein the number of recorded times used to calculate the average latency is limited to a defined maximum, and is more than one.

6. (Previously amended) The method of claim 1 wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first market and at least one recorded time when a corresponding response is received from the first market, wherein the calculating uses the latest recorded time when a message is sent to the first market and the latest recorded time when a corresponding response is received from the first market, and wherein the number of recorded times used to calculate the average latency is limited to a defined maximum.

7. (Previously amended) The method of claim 1 further comprising the steps of:

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counting the number of messages sent to at least one market during a period of time, including storing in computer memory the number of messages sent to the first market during the period of time;

counting the number of responses received from the at least one market during the period of time, including storing in computer memory the number of responses received from the first market during the period of time; and

displaying, in addition to the identity of the first market and the first latency for the market, the number of messages sent to the first market and the number of responses received from the first market during the period of time.

8. (Previously Amended) The method of claim 1 further comprising the steps of:

counting the number of messages sent to a market through a port during a period of time, including storing in computer memory the number of messages sent to the first market through the port during the period of time;

counting the number of responses received from the first market through the port during the period of time, including storing in computer memory the number of responses received from the market through the port during the period of time; and

displaying, in addition to the identify of the first market and the first latency for the first market, the number of messages sent to the first market through the port and the number of responses received from the first market through the port during the period of time.

9-17. (Cancelled)

18. (Previously Amended) The method of claim 1, further comprising:

selecting one of said first and second markets based on said calculations for said first

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latency and said second latency.

19. (Previously Presented) The method of claim 1, said messages further comprising cancellations of orders.
20. (Previously Presented) The method of claim 1, said step of displaying being to a customer who originates at least one of said messages and selects one of said markets after said step of displaying.
21. (Previously Presented) The method of claim 1, said response indicating that at least one of said orders has been filled.
22. (Previously amended) The method of claim 4, said average latency dependent upon at least two recorded times when at least two messages are sent to the first markets and at least two recorded times when corresponding responses are received from the first market.
23. (Previously Presented) The method of claim 2, where an absence of responses indicates failure of said port.
24. (Previously Presented) The method of claim 1, said response indicating that at least one of said orders has not been filled.
25. (Withdrawn) A method of selecting a market, comprising:
sending electronically a first message to a first market;

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sending electronically a second message to a second market;
recording for said first message a first transmission time when said first message is sent;
recording for said second message a second transmission time when said second message is sent;
receiving from said first market, at a first reception time, a response to said first message;
receiving from said second market, at a second reception time, a response to said second message;
calculating by a processor a first latency for said first message based on said first transmission time and said first reception time; and
calculating by said processor a second latency for said second message based on said second transmission time and said second reception time.

26. (Withdrawn) The method of claim 25, further comprising:
comparing said first latency and said second latency; and
selecting said first market or said second market depending upon which of said first and second latencies is shorter.

27. (Withdrawn) The method of claim 26, further comprising:
displaying said first latency and an identity for said first market;
displaying said second latency and an identity for said second market;

28. (Withdrawn) The method of claim 25, wherein the first latency comprises an instant latency calculated dependent upon one recorded time when one message is sent to the first market and one recorded time when a corresponding response is received from the first market.

29. (Withdrawn) The method of claim 25, wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first

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market and at least one recorded time when a corresponding response is received from the first market, wherein all the recorded times used in calculating the first latency are recorded during a defined period of time.

30. (Withdrawn) The method of claim 25, wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first market and at least one recorded time when a corresponding response is received from the first market, wherein the number of recorded times used to calculate the average latency is limited to a defined maximum, and is more than one.

31. (Withdrawn) The method of claim 25, wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first market and at least one recorded time when a corresponding response is received from the first market, wherein the calculating uses the latest recorded time when a message is sent to the first market and the latest recorded time when a corresponding response is received from the first market, and wherein the number of recorded times used to calculate the average latency is limited to a defined maximum.

32. (Withdrawn) The method of claim 25, further comprising the steps of:

counting the number of messages sent to at least one market during a period of time, including storing in computer memory the number of messages sent to the first market during the period of time;

counting the number of responses received from the at least one market during the period of time, including storing in computer memory the number of responses received from the first market during the period of time; and

displaying, in addition to the identity of the first market and the first latency for the first

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market, the number of messages sent to the first market and the number of responses received from the first market during the period of time.

33. (Withdrawn) A method of selecting a port connected to a market, said market connected to at least a first port and a second port, comprising:

sending electronically a first message to a market through a first port;

sending electronically a second message to the market through a second port;

recording for said first message a first transmission time when said first message is sent;

recording for said second message a second transmission time when said second message is sent;

receiving from said first port, at a first reception time, a response to said first message;

receiving from said second port, at a second reception time, a response to said second message;

calculating by a processor a first latency for said first port based on said first transmission time and said first reception time; and

calculating by said processor a second latency for said second port based on said second transmission time and said second reception time.

34. (Withdrawn) The method of claim 33, further comprising:

comparing said first latency and said second latency; and

selecting said first port or said second port depending upon which of said first and second latencies is shorter.

35. (Withdrawn) The method of claim 34, further comprising:

displaying said first latency and an identity for said first market;

displaying said second latency and an identity for said second market;

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36. (Withdrawn) The method of claim 33, wherein the first latency comprises an instant latency calculated dependent upon one recorded time when one message is sent to the first port and one recorded time when a corresponding response is received from the first port.

37. (Withdrawn) The method of claim 33, wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first port and at least one recorded time when a corresponding response is received from the first port, wherein all the recorded times used in calculating the first latency are recorded during a defined period of time.

38. (Withdrawn) The method of claim 33, wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first port and at least one recorded time when a corresponding response is received from the first port, wherein the number of recorded times used to calculate the average latency is limited to a defined maximum, and is more than one.

39. (Withdrawn) The method of claim 33, wherein the first latency comprises an average latency dependent upon at least one recorded time when at least one message is sent to the first port and at least one recorded time when a corresponding response is received from the first port, wherein the calculating uses the latest recorded time when a message is sent to the first port and the latest recorded time when a corresponding response is received from the first port, and wherein the number of recorded times used to calculate the average latency is limited to a defined maximum.

40. (Withdrawn) The method of claim 33, further comprising the steps of:
counting the number of messages sent to at least one port during a period of time,

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including storing in computer memory the number of messages sent to the first port during the period of time;

counting the number of responses received from the at least one port during the period of time, including storing in computer memory the number of responses received from the first port during the period of time; and

displaying, in addition to the identity of the first port and the first latency for the first port, the number of messages sent to the first port and the number of responses received from the first port during the period of time.